

Allianz Life Insurance Company of North America

**Home Office:
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Actuarial Memorandum Supporting 44% Aggregate Premium Rate Increase On Individual Long-Term Care Insurance Policy Forms

1. TYPE OF CHANGE

Allianz Life Insurance Company of North America (the Company) proposes the following rate revisions on the below long-term care (LTC) policy form. The company issued this policy form in Maryland between 2004 and 2007.

<u>Product Name</u>	<u>Form series (including associated riders)</u>
Generation Protector (GPR)	10-P-Q-MD

The premium rate increase request varies by benefit period. The table below provides the requested rate increase:

Policy Form Series	Benefit Period		
	2-4 Years	5-8 Years	Lifetime
GPR	20%	45%	65%

2. PURPOSE OF FILING

This memorandum has been prepared to provide actuarial information supporting a rate revision to premiums for the form series above. The rate revision meets the minimum requirements in the statutes of Maryland.

The Company is requesting a premium rate increase on the above-listed form, including all associated riders. This form is in need of a premium rate increase due to past and projected future experience that continues to be more adverse than previously expected and originally priced for.

3. LIMITATIONS AND EXCLUSIONS

This actuarial memorandum is intended to support the premium rate increase on the policy form described above and it is not appropriate to use for any other purposes.

4. HISTORY OF RATE REVISION

The table below provides the rate increase history in Maryland for the policy form series in this filing.

Rate Increase Round	Policy Form Series: GPR		
	Date of Approval	Rate Increase Amount	SERFF Tracking Number (if available)
First Rate Increase	11/13/2012	15.0%	ALLB-128730821
Second Rate Increase	5/16/2016	15.0%	ALLB-130163702
Third Rate Increase	7/2/2019	12.6%	ALLB-131810182

Exhibit 1 provides the rate increase history nationwide for the policy form series in this filing.

5. SCOPE AND APPLICABILITY

This filing applies to active premium paying policies issued in this state for the policy form listed above. This policy form is no longer being marketed. This policy form includes premium payment options and traditional level-pay-for-life. All premium paying policies are included in this filing and in the attached distribution of business Exhibits. Exhibit 1 provides a distribution of in-force policies and total annual premiums by issue state.

These rates when approved will be applied to policies delivered or issued for delivery in the state of Maryland, regardless of place of current residence.

6. DESCRIPTION OF BENEFITS

These plans are Guaranteed Renewable, Tax-Qualified, Individual Long Term Care Insurance plans. Plans cover facility care and home and community care where applicable. Premiums vary by issue age and are projected to be level for the duration of the policy, unless modified by the riders elected by the policyholder. Rider charges are factor based and are a multiplier of the base premium.

Several coverage options are available:

- ❖ Various Maximum Benefit Periods
- ❖ Various Daily Benefit Amounts
- ❖ Various Elimination Periods
- ❖ Facility Care Plan with various Home and Community Care Benefit levels
- ❖ Separate rates for different underwriting classes
- ❖ Separate rates for joint and single lives

7. POLICYHOLDER OPTIONS

Assuming that the proposed rate increase becomes effective, policyholders will have the following options upon notification of the rate increase:

Policyholder Options to Reduce Benefits:

Policyholders with benefits above the minimum coverage level have the option to modify their policy benefits to mitigate the impact of the proposed rate increase. As examples, the options include, but are not limited to the following:

1. Reduce their benefit period,
2. Lower their daily benefit,

3. Increase their elimination period,
4. Reduce or cancel cost of living accumulation (COLA) riders.

To further minimize the impact to policyholders: As a part of this rate increase, for a limited time policyholders who reduce or cancel their COLA benefit riders will maintain all of their past COLA benefit increase percentages. Future premiums and benefit increases will be based on the new coverage levels elected by the policyholder. If the policyholder reduces their daily benefit, then the past increase in daily benefit from COLA rider will be reduced by the same proportion.

Non-forfeiture Offers:

In addition, the Company will give the policyholder the option to accept a non-forfeiture benefit if they receive a premium increase at no charge. Acceptance of the non-forfeiture benefit will provide the policyholder with a reduced paid-up policy, with no future premiums required after the effective date of the policyholder's rate increase. Policyholders who elect this option will pay no additional premiums after the effective date of the rate increase, and their benefit pool will be their total premiums paid. In consideration of our policyholders, our company does not subtract past claims from the benefit pool prior to the election of this rider.

8. ISSUE YEAR

This form was sold from 2004 to 2007 in Maryland, and marketed nationally from 2003 through 2009. This form is no longer being issued in any state as Allianz stopped issuing all individual standalone long-term care insurance in 2010.

9. UNDERWRITING DESCRIPTION

All policies subject to this rate revision were subject to full underwriting in accordance with Company standards in place at the time of issue. Those underwriting standards were taken into consideration when projecting future experience.

10. MARKETING METHOD

Sales were conducted by individual agents, who sold primarily on an individual policy basis. The Company no longer sells long-term care insurance policies.

11. AREA FACTORS

The Company did not use area factors within the state.

12. AVERAGE ANNUAL PREMIUM PER INSURED

This section compares the average premiums of the Maryland policy form and nationwide policy form. The following table provides the average annual premium based on December 31, 2020 in-force policies for the policy form included in this filing, both without and with the requested increase.

Maryland Generation Protector Policy Form:

Current Average Annual Premium:	\$2,689	(664 Premium Paying Policies)
Proposed (44% increase):	\$3,863	

National Generation Protector Policy Form:

2020 Annual Premium:	\$2,401	(28,800 Premium Paying Policies)
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13. PREMIUM MODALIZATION RULES

The modal premium factors will remain unchanged from the current factors.

14. CLAIM RESERVE

At each valuation date, a claim reserve is computed for each active and pending claim case. For active claims, the claim reserve is calculated as the present value of future benefits from the valuation date to the end of the benefit period. Benefit amounts are discounted for interest and claim continuance. Claim reserves have been discounted and allocated to the appropriate incurred year.

15. BEST ESTIMATE ACTUARIAL ASSUMPTIONS

a. Morbidity:

Attained age claim costs and Waiver of Premium benefits used in projecting future experience for this form have been developed utilizing Company-specific policy experience enhanced with other industry data as needed. Claim costs vary by joint policy status (joint vs. single), gender and various levels of home health care with adjustments for elimination periods, benefit periods, and riders.

Claim costs are developed from first principle using company-specific historical claim experience. Allianz incidence rates are typically credible up to age 89. Allianz data was then graded towards industry data for ages 89 and above, ultimately equating with industry experience by age 100. Continuance and utilization rates from Allianz claim data were blended with industry data when experience lacked credibility (fewer than 1,000 beginning of month claim exposures). Allianz experience was generally in line with industry data.

Future claim costs are projected on a seriatim basis for each policyholder. These claim costs are adjusted according to each policy's benefit designs, such as COLA option, elimination periods and benefit periods.

Underwriting, claim management and product design were taken into consideration when setting the assumptions. Allianz historical experience includes the positive impact of underwriting selection. No scalar increases to the claim cost assumption are made within these projections to reflect future wear off from underwriting selection.

b. Mortality:

The projected future experience uses the gender-distinct 2012 Individual Annuitant Mortality (2012 IAM). This assumption is developed based on feedback from our consultants and is consistent with

industry practice. The mortality assumption balances our morbidity assumption as neither is projected to have future improvements.

c. Persistency:

The Company’s own experience was used in the development of the lapse assumption. The experience is determined to be credible through policy duration 11. The voluntary lapse assumption is split by duration, marital status and COLA option as follows:

Duration	Individual		Married	
	Non-COLA	COLA	Non-COLA	COLA
1	9.50%	7.00%	7.70%	3.50%
2	6.80%	4.50%	5.80%	2.50%
3	4.00%	2.20%	3.80%	1.50%
4	3.00%	1.50%	2.80%	1.25%
5	2.30%	1.30%	1.00%	0.50%
6	1.60%	0.90%	1.00%	0.50%
7+	1.40%	0.75%	1.00%	0.40%

Additional lapses caused by exhaustion of benefits are also modeled using claim incidence, continuance, and utilization rates.

Based on company experience, a 1% increase to lapse rate is assumed immediately after the implementation of the rate increase to account for the election of reduced paid up benefit.

d. Expected Benefit Reduction:

Based on company experience from previous rate increases, the cash flow projection for the proposed rate increase includes an expectation of policyholders lowering their lifetime maximum benefit.

Lifetime benefit period policies are projected to reduce to a 5 year benefit period 12% of the time and to a 3 year benefit period 4% of the time. Policyholders with a non-lifetime benefit period equal to or greater than 5 years are projected to reduce to a 3 year benefit period 6% of the time.

e. Interest and Investment Income:

The interest rate of 4.5% used in the original product filing is also used in these exhibits to calculate the loss ratio. Changes in interest rates and investment income are not used to justify the rate increase.

f. Expenses:

Changes in expense are not used to justify the rate increase and are not included in this analysis. It is assumed that original expense assumptions are still appropriate.

Exhibit 2 provides additional information and justification for the assumptions used in this filing.

16. DEMONSTRATION OF SATISFACTION OF REQUIREMENTS

The projections included in this filing are produced by applying “best estimate” actuarial assumptions that reasonably reflect actual experience. All policies other than traditional-level-pay-for-life are excluded from the historical and projected experience used to calculate loss ratios. The anticipated lifetime loss ratio for policies based on Maryland specific rate history and these assumptions before the requested rate increase is 114.1% nationwide and 113.7% in Maryland based on pooled experience (Exhibit 3 & 4). The lifetime loss ratio after the requested rate increase is 101.0% nationwide and 99.4% in Maryland based on pooled experience (Exhibits 5 & 6).

The requested rate increase is not calculated to achieve a targeted loss ratio or to maintain rate stability since that would require a significantly larger rate increase. The request is meant to find a balance between the poor performance of the business and the impact of rate increases on our policyholders.

The Company is aware of COMAR 31.14.01.04A(5) and that the requested rate increase would result in an increase greater than 15%. The company would also like to advise policyholders about future rate increases and therefore the company requests an opportunity to work with the Administration to obtain a current approval of the requested premium rate increase with the agreement that the approved increase will be implemented at no more than 15% per year. However, experience in Exhibits 4 and 6 reflects a one-time rate increase implementation. Spreading the rate increase over multiple years would only increase the lifetime loss ratios.

A detailed demonstration of the 58/85 calculations justifying the rate increase can be found in Exhibit 7. The justifiable rate increases under moderately adverse conditions are over 175% on a nationwide basis based on pooled experience. Moderately adverse conditions for the 58/85 calculation are defined as a 10% increase in future claim cost over the current best estimate. Even though some of the policies in this filing may be subject to pre-rate stability minimum loss ratio requirements, we are showing justification of the rate increase by holding all policies to the more stringent 58/85 calculation.

17. ANALYSIS PERFORMED TO CONSIDER A RATE INCREASE

The initial premium schedules were based on pricing assumptions that reflected the Company’s best estimate utilizing the available information at the time. Recent experience studies performed show that experience is more unfavorable than previously assumed which resulted in assumptions being updated and has led to the Company requesting a rate increase on this product. This level is in line with our request nationwide on this policy form. The Maryland specific experience lacks credibility and was not considered on its own in determining the requested rate level compared to our nationwide requests. The original pricing assumptions compared to our current assumptions are included in Exhibit 8.

18. LOSS RATIOS

The lifetime loss ratios for the policy form series split by benefit period are provided in the table below both without and with the requested rate increase. To reflect Maryland specific rate history, nationwide loss ratios are restated to reflect rate increases implemented in Maryland. For actuarial modeling purposes the requested rate increase is assumed to be effective December, 2021.

Benefit Period	Before Increase	After Increase
Maryland		
2-4 Years	89.5%	85.2%
5-8 Years	121.8%	106.3%
Lifetime	128.1%	104.4%
All	113.7%	99.4%
Nationwide		
2-4 Years	90.1%	86.0%
5-8 Years	120.3%	106.2%
Lifetime	132.8%	109.5%
All	114.1%	101.0%

19. DISTRIBUTION OF BUSINESS

The historical experience reflects the actual distribution of policies during the experience period. We used the current distribution of business as of December 31, 2020 to project future experience.

Nationwide							
Benefit period	5% Compound COLA	4% Compound COLA	3% Compound COLA	5% Simple COLA	Two Times COLA	No COLA	Grand Total
2-Year	0.4%	0.1%	0.3%	0.3%	0.3%	1.0%	2.3%
3-Year	4.7%	0.9%	2.8%	2.6%	1.6%	5.2%	17.8%
4-Year	5.4%	1.2%	2.4%	2.2%	1.1%	3.0%	15.3%
5-Year	10.2%	2.1%	4.2%	3.4%	1.9%	5.8%	27.6%
8-Year	4.8%	1.0%	1.8%	1.3%	0.9%	2.1%	11.9%
Lifetime	11.0%	1.4%	3.4%	3.5%	1.3%	4.5%	25.1%
Grand Total	36.6%	6.7%	14.8%	13.4%	7.0%	21.4%	100.0%

Maryland									
Benefit period	5% Compound COLA	4% Compound COLA	3% Compound COLA	5% Simple COLA	Two Times COLA	No COLA	Grand Total	Proposed Rate Increase	Policyholders Impacted
2-Year	0.2%	0.0%	0.3%	0.2%	0.5%	2.4%	3.5%	20%	23
3-Year	6.6%	1.2%	1.5%	1.8%	2.0%	3.5%	16.6%	20%	110
4-Year	5.4%	2.1%	3.0%	0.9%	1.8%	1.7%	14.9%	20%	99
5-Year	10.7%	2.0%	3.3%	2.4%	4.4%	4.2%	27.0%	45%	179
8-Year	7.5%	0.9%	0.9%	1.4%	0.6%	0.5%	11.7%	45%	78
Lifetime	15.4%	1.8%	2.7%	2.3%	0.8%	3.5%	26.4%	65%	175
Grand Total	45.8%	8.0%	11.7%	8.9%	9.9%	15.7%	100.0%	44%	664

20. ACTUARIAL CERTIFICATION

I am a Fellow of the Society of Actuaries and a Member of the American Academy of Actuaries, and I meet the Academy's qualifications standards for preparing health rate filings.

Claims, reserves, and policyholder data are provided by our third party administrator and our valuation actuaries. Data was reviewed for reasonableness.

I hereby certify that, to the best of my knowledge and belief:

- a. It complies with Actuarial Standards of Practice No. 8 "Regulatory Filings for Rates and Financial Projections for Health Plans";
- b. The premiums charged after the proposed rate increase is not unfairly discriminatory and the premiums after the proposed rate increase are not excessive. The proposed premium rate increase is not sufficient to prevent future rate actions by the company and benefits currently are not reasonable in relation to the premiums charged.
- c. Assumptions within this filing are based on best estimate without provision for adverse deviation while interest rates used are based on original product filing.

Allianz Life Insurance of North America

By:  _____

Noelle Destrampe, FSA MAAA
Actuary
Its: Authorized Designee

July 1, 2021

Exhibit 1
Allianz Life Insurance Company of North America
Status of Filing as of 4/12/2021
Policy Form Series : 10-P-Q, et al.

State	First Rate Increase				Second Rate Increase				Second Rate Increase (Follow-up)				Third Rate Increase				Cumulative Approved Increase	As of December 31, 2020	
	Amount Requested	Date Filed	Date Approved	Amount Approved	Amount Requested	Date Filed	Date Approved	Amount Approved	Amount Requested	Date Filed	Date Approved	Amount Approved	Amount Requested	Date Filed	Date Approved	Amount Approved		Policy Count	Annualized Premium
Alabama	25.0%	10/29/2012	12/6/2012	20.0%	39.0%	10/16/2015	5/11/2016	18.3%					47.8%	TBD			42.0%	449	\$ 955,644
Alaska	25.0%	10/25/2012	11/16/2012	25.0%	39.0%	10/21/2015	10/21/2015	39.0%									73.8%	56	\$ 183,301
Arizona	75.0%	2/1/2013	3/27/2013	75.0%	Not Filing												75.0%	596	\$ 1,605,765
Arkansas	30.0%	10/16/2015	12/17/2015	25.0%					9.0%	2/7/2019	3/20/2019	9.3%					36.6%	270	\$ 513,097
Colorado	25.0%	5/17/2013	8/1/2013	25.0%	39.0%	12/27/2017	6/2/2017	10.4%					64.6%	TBD			38.0%	975	\$ 2,272,234
Connecticut	25.0%	5/20/2014	Disapproved	0.0%	39.0%	5/5/2016	9/22/2016	15.0%	29.0%	2/7/2019	4/3/2019	12.0%					28.8%	204	\$ 649,734
Delaware	20.0%	10/29/2012	3/15/2013	15.0%	39.0%	12/27/2018	4/1/2019	39.0%									59.9%	95	\$ 157,769
Dist. of Columbia					39.0%	1/7/2019	9/21/2019	8.5%									8.5%	48	\$ 96,679
Florida	25.0%	6/3/2013	11/26/2013	7.3%	56.4%	12/31/2019	9/24/2020	93.6%									107.7%	1,136	\$ 2,391,208
Georgia	25.0%	10/31/2012	2/8/2013	15.0%	39.0%	10/16/2015	3/15/2016	12.0%	27.0%	2/7/2019	5/21/2019	10.2%					41.9%	1,188	\$ 2,806,443
Hawaii	25.0%	10/31/2012	7/19/2013	9.5%	39.0%	10/16/2015	11/15/2018	38.8%									52.0%	387	\$ 971,519
Idaho	25.0%	11/2/2012	2/21/2013	10.0%	39.0%	10/16/2015	12/24/2015	39.0%									52.9%	166	\$ 377,997
Illinois	100.0%	11/6/2012	12/8/2014	100.0%	Not Filing												100.0%	1,219	\$ 2,848,527
Indiana	39.0%	5/22/2019	Disapproved	0.0%	87.0%	6/26/2020	9/3/2020	9.6%									9.6%	280	\$ 516,031
Iowa	25.0%	11/8/2012	9/10/2013	15.0%	39.0%	10/16/2015	4/7/2016	17.9%	21.0%	2/7/2019	3/18/2019	11.2%					50.8%	761	\$ 1,647,967
Kansas	25.0%	10/29/2012	3/29/2013	10.0%	61.5%	10/16/2015	7/26/2016	61.5%									77.7%	579	\$ 1,199,210
Kentucky	25.0%	11/7/2012	2/4/2013	18.3%	39.0%	10/16/2015	1/18/2016	35.9%									60.7%	322	\$ 717,914
Louisiana					39.0%	12/27/2018	9/23/2019	39.0%									39.0%	293	\$ 448,071
Maine - LR*	25.0%	12/19/2012	4/3/2013	23.5%	39.0%	1/12/2016	8/18/2016	36.1%									68.1%	125	\$ 339,595
Maine - RS*	25.0%	10/16/2012	1/18/2013	25.0%	39.0%	1/12/2016	8/18/2016	45.5%									81.9%	159	\$ 458,387
Maryland	15.0%	10/29/2012	11/13/2012	15.0%	39.0%	10/16/2015	5/19/2016	15.0%	12.0%	2/7/2019	7/2/2019	12.6%	43.7%	TBD			48.9%	664	\$ 1,785,236
Massachusetts	30.0%	5/5/2016	9/6/2017	15.0%	60.2%	TBD											15.0%	871	\$ 2,234,712
Michigan	25.0%	10/25/2012	11/26/2012	25.0%	39.0%	10/16/2015	11/6/2015	39.0%									73.8%	548	\$ 1,334,137
Minnesota	30.0%	2/11/2015	1/22/2016	30.0%	60.1%	TBD											30.0%	1,388	\$ 2,668,053
Mississippi	25.0%	11/8/2012	3/11/2013	25.0%	39.0%	10/16/2015	12/16/2015	25.0%	6.0%	2/7/2019	10/22/2019	6.0%					65.6%	128	\$ 275,122
Missouri - LR*	25.0%	6/4/2013	7/16/2013	25.0%	39.0%	11/16/2015	1/29/2016	39.0%									73.8%	298	\$ 661,906
Missouri - RS*	25.0%	5/17/2013	9/3/2013	25.0%	39.0%	10/16/2015	1/29/2016	39.0%									73.8%	459	\$ 1,043,311
Montana	25.0%	10/25/2012	12/3/2012	10.0%	39.0%	10/16/2015	6/8/2017	14.3%	23.0%	2/7/2019	5/21/2019	23.2%					54.9%	129	\$ 336,826
Nebraska	25.0%	10/31/2012	6/19/2013	10.0%	39.0%	10/16/2015	12/10/2015	39.0%									52.9%	487	\$ 1,104,173
Nevada	30.0%	10/16/2015	2/8/2016	30.0%	56.6%	TBD											30.0%	93	\$ 168,334
New Hampshire	25.0%	12/7/2012	2/12/2013	25.0%	39.0%	10/16/2015	2/16/2016	39.0%									73.8%	133	\$ 332,459
New Jersey	25.0%	3/20/2013	3/13/2014	15.0%	39.0%	10/16/2015	10/27/2016	23.1%									41.6%	636	\$ 1,942,853
New Mexico	25.0%	11/8/2012	Disapproved	0.0%	39.0%	12/27/2018	1/28/2019	15.0%									15.0%	230	\$ 447,294
North Carolina	25.0%	11/21/2012	6/18/2013	25.0%	39.0%	10/16/2015	5/10/2016	30.0%					44.0%	TBD			62.5%	1,484	\$ 3,616,522
North Dakota	25.0%	10/31/2012	1/9/2013	15.0%	39.0%	10/16/2015	12/14/2015	15.0%	17.0%	2/7/2019	3/11/2019	10.0%					45.5%	96	\$ 191,550
Ohio	25.0%	11/7/2012	4/23/2013	25.0%	39.0%	10/16/2015	5/20/2016	15.0%	25.0%	2/7/2019	7/24/2019	11.0%					59.6%	867	\$ 2,042,666
Oklahoma	25.0%	11/8/2012	1/3/2013	25.0%	39.0%	10/16/2015	2/22/2016	10.0%	25.0%	2/7/2019	3/14/2019	12.3%					54.4%	310	\$ 663,331
Oregon	25.0%	11/7/2012	3/26/2014	25.0%	39.0%	10/16/2015	1/28/2016	39.0%									73.8%	463	\$ 1,173,887
Pennsylvania	25.0%	11/16/2012	2/12/2013	20.0%	39.0%	10/16/2015	3/30/2016	31.5%					40.1%	TBD			57.8%	1,431	\$ 3,629,838
Rhode Island					39.0%	12/27/2018	1/21/2020	39.0%									39.0%	77	\$ 153,833
South Carolina	25.0%	11/5/2012	2/22/2013	20.0%	39.0%	10/16/2015	2/8/2016	20.0%	16.0%	2/7/2019	11/21/2019	9.8%					58.1%	385	\$ 847,836
South Dakota	25.0%	11/7/2012	12/26/2012	25.0%	39.0%	10/16/2015	11/13/2015	39.0%									73.8%	224	\$ 557,559
Tennessee	25.0%	11/7/2012	3/20/2013	25.0%	39.0%	10/16/2015	4/5/2016	39.0%					41.5%	TBD			73.8%	614	\$ 1,326,009
Texas	75.0%	5/6/2013	9/23/2013	75.0%	Not Filing												75.0%	2,821	\$ 7,459,682
Utah	30.0%	10/19/2015	12/15/2015	30.0%	Not Filing												30.0%	153	\$ 309,744
Vermont					39.0%	12/27/2018											0.0%	134	\$ 260,463
Virginia	56.3%	11/8/2012	6/8/2016	56.3%	Not Filing												56.3%	1,678	\$ 4,483,588
Washington	25.0%	11/8/2012	4/12/2013	25.0%	39.0%	10/19/2015	6/16/2016	25.8%									57.3%	2,087	\$ 5,509,260
West Virginia	25.0%	11/16/2012	1/30/2013	25.0%	39.0%	10/16/2015	2/26/2016	39.0%									73.8%	62	\$ 138,516
Wisconsin	25.0%	11/7/2012	2/6/2013	25.0%	39.0%	12/17/2015	9/19/2016	39.0%									73.8%	478	\$ 1,111,362
Wyoming	25.0%	10/23/2012	2/4/2013	25.0%	39.0%	10/16/2015	2/9/2016	39.0%									73.8%	64	\$ 181,287
Total																	59.4%	28,800	\$ 69,148,438

* LR = policies issued prior to the effective date of rate stability in that state.

RS = policies issued on or after the effective date of rate stability in that state.

Exhibit 3
Allianz Life Insurance Company of North America
Nationwide Experience
Policy Form Series: GPR
As of 12/31/2020
No Requested Rate Increase

<u>Year</u>	<u>Earned Premium</u>	<u>Incurred Claims</u>	<u>Loss Ratio</u>
2003	\$812,042	\$0	0.0%
2004	\$15,433,770	\$447,442	2.9%
2005	\$36,473,946	\$1,117,653	3.1%
2006	\$56,837,919	\$6,042,811	10.6%
2007	\$65,093,403	\$4,568,674	7.0%
2008	\$65,442,096	\$6,871,620	10.5%
2009	\$63,841,555	\$7,677,965	12.0%
2010	\$62,117,671	\$7,984,727	12.9%
2011	\$60,662,143	\$8,498,542	14.0%
2012	\$59,540,290	\$13,080,434	22.0%
2013	\$58,456,682	\$13,369,900	22.9%
2014	\$60,987,124	\$20,314,085	33.3%
2015	\$62,462,626	\$23,907,519	38.3%
2016	\$60,933,315	\$30,565,863	50.2%
2017	\$62,541,126	\$32,337,275	51.7%
2018	\$64,472,142	\$37,662,903	58.4%
2019	\$62,672,654	\$41,919,308	66.9%
2020	\$64,209,919	\$54,266,491	84.5%
2021	\$64,099,322	\$43,412,914	67.7%
2022	\$62,242,090	\$50,428,212	81.0%
2023	\$59,793,072	\$56,589,765	94.6%
2024	\$57,278,901	\$63,840,688	111.5%
2025	\$54,711,318	\$71,860,796	131.3%
2026	\$52,091,497	\$80,772,348	155.1%
2027	\$49,427,736	\$90,244,210	182.6%
2028	\$46,722,998	\$100,372,935	214.8%
2029	\$43,994,155	\$110,348,771	250.8%
2030	\$41,248,168	\$120,164,573	291.3%
2031	\$38,500,570	\$129,269,857	335.8%
2032	\$35,761,009	\$137,951,743	385.8%
2033	\$33,052,406	\$145,363,173	439.8%
2034	\$30,386,262	\$151,889,052	499.9%
2035	\$27,781,757	\$157,056,037	565.3%
2036	\$25,251,127	\$161,258,176	638.6%
2037	\$22,817,680	\$163,573,082	716.9%
2038	\$20,492,175	\$164,464,797	802.6%
2039	\$18,290,100	\$163,508,532	894.0%
2040	\$16,218,412	\$161,216,229	994.0%
2041	\$14,291,093	\$156,883,022	1097.8%
2042	\$12,510,453	\$151,400,750	1210.2%
2043	\$10,881,646	\$144,681,445	1329.6%
2044	\$9,402,213	\$137,382,218	1461.2%
2045	\$8,073,539	\$128,807,882	1595.4%
2046	\$6,887,626	\$119,727,576	1738.3%
2047	\$5,838,737	\$110,240,852	1888.1%
2048	\$4,917,193	\$100,931,750	2052.6%
2049	\$4,116,929	\$91,416,485	2220.5%
2050	\$3,426,588	\$82,228,320	2399.7%
2051	\$2,836,377	\$73,357,911	2586.3%
2052	\$2,334,694	\$65,230,786	2794.0%
2053	\$1,912,663	\$57,527,170	3007.7%
2054	\$1,559,450	\$50,518,442	3239.5%
2055	\$1,265,928	\$44,044,325	3479.2%
2056	\$1,022,771	\$38,215,131	3736.4%
2057	\$822,845	\$32,814,630	3987.9%
2058	\$658,888	\$28,007,570	4250.7%
2059	\$525,228	\$23,748,408	4521.5%
2060	\$416,608	\$20,076,821	4819.1%
2061	\$329,011	\$16,813,906	5110.4%
2062	\$258,531	\$14,016,575	5421.6%
2063	\$202,142	\$11,611,523	5744.3%
2064	\$157,179	\$9,607,246	6112.3%
2065	\$121,632	\$7,876,660	6475.8%
2066	\$93,595	\$6,395,997	6833.7%
2067	\$71,610	\$5,123,739	7155.0%
2068	\$54,421	\$4,064,866	7469.3%
2069	\$41,092	\$3,180,814	7740.7%
2070	\$30,796	\$2,466,482	8009.2%
2071	\$22,903	\$1,892,627	8263.5%
2072+	\$59,176	\$5,672,459	9585.7%

Summary of Experience at 4.5%

	<u>Earned Premium</u>	<u>Incurred Claims</u>	<u>Loss Ratio</u>
Historical (YE2020)	\$1,421,918,320	\$385,487,225	27.1%
Projected Future (2021 +)	\$613,839,611	\$1,936,939,750	315.5%
Total Lifetime Anticipated	\$2,035,757,930	\$2,322,426,975	114.1%

Exhibit 4
Allianz Life Insurance Company of North America
Maryland Experience
Policy Form Series: GPR
As of 12/31/2020
No Requested Rate Increase

<u>Year</u>	<u>Earned Premium</u>	<u>Incurred Claims</u>	<u>Loss Ratio</u>
2003	\$0	\$0	0.0%
2004	\$181,148	\$0	0.0%
2005	\$740,786	\$0	0.0%
2006	\$1,386,752	\$1,540	0.1%
2007	\$1,641,739	\$334,770	20.4%
2008	\$1,612,620	\$283,806	17.6%
2009	\$1,572,448	\$0	0.0%
2010	\$1,531,969	\$4,042	0.3%
2011	\$1,501,567	\$131,982	8.8%
2012	\$1,483,532	\$142,642	9.6%
2013	\$1,451,323	\$0	0.0%
2014	\$1,508,729	\$413,233	27.4%
2015	\$1,573,886	\$224,814	14.3%
2016	\$1,549,221	\$694,807	44.8%
2017	\$1,600,169	\$159,661	10.0%
2018	\$1,665,384	\$911,835	54.8%
2019	\$1,635,394	\$699,917	42.8%
2020	\$1,696,737	\$1,379,961	81.3%
2021	\$1,720,904	\$1,018,837	59.2%
2022	\$1,671,653	\$1,196,943	71.6%
2023	\$1,608,188	\$1,352,283	84.1%
2024	\$1,542,982	\$1,532,694	99.3%
2025	\$1,476,388	\$1,731,680	117.3%
2026	\$1,408,482	\$1,955,275	138.8%
2027	\$1,339,471	\$2,197,109	164.0%
2028	\$1,269,391	\$2,458,116	193.6%
2029	\$1,198,688	\$2,720,754	227.0%
2030	\$1,127,548	\$2,986,664	264.9%
2031	\$1,056,342	\$3,241,906	306.9%
2032	\$985,266	\$3,493,430	354.6%
2033	\$914,886	\$3,715,690	406.1%
2034	\$845,487	\$3,918,941	463.5%
2035	\$777,575	\$4,092,337	526.3%
2036	\$711,463	\$4,246,238	596.8%
2037	\$647,724	\$4,353,684	672.2%
2038	\$586,603	\$4,425,862	754.5%
2039	\$528,467	\$4,449,339	841.9%
2040	\$473,464	\$4,439,183	937.6%
2041	\$421,938	\$4,377,928	1037.6%
2042	\$373,929	\$4,286,421	1146.3%
2043	\$329,584	\$4,162,172	1262.9%
2044	\$288,854	\$4,026,087	1393.8%
2045	\$251,800	\$3,853,690	1530.5%
2046	\$218,228	\$3,659,539	1676.9%
2047	\$188,026	\$3,443,912	1831.6%
2048	\$160,986	\$3,224,390	2002.9%
2049	\$137,032	\$2,991,074	2182.8%
2050	\$115,937	\$2,753,415	2374.9%
2051	\$97,507	\$2,510,113	2574.3%
2052	\$81,483	\$2,275,584	2792.7%
2053	\$67,700	\$2,041,918	3016.1%
2054	\$55,912	\$1,824,205	3262.7%
2055	\$45,914	\$1,612,047	3511.0%
2056	\$37,473	\$1,413,572	3772.2%
2057	\$30,415	\$1,226,145	4031.3%
2058	\$24,542	\$1,057,755	4310.1%
2059	\$19,688	\$907,183	4607.7%
2060	\$15,696	\$771,599	4915.8%
2061	\$12,448	\$650,410	5225.0%
2062	\$9,818	\$546,341	5564.6%
2063	\$7,707	\$457,613	5937.6%
2064	\$6,023	\$382,600	6352.1%
2065	\$4,692	\$314,716	6707.1%
2066	\$3,644	\$256,882	7050.2%
2067	\$2,823	\$207,544	7351.2%
2068	\$2,185	\$165,503	7573.2%
2069	\$1,693	\$130,444	7703.2%
2070	\$1,312	\$102,271	7796.6%
2071	\$1,014	\$80,614	7947.0%
2072+	\$2,946	\$270,145	9169.2%

Summary of Experience at 4.5%

	<u>Earned Premium</u>	<u>Incurred Claims</u>	<u>Loss Ratio</u>
Historical (YE2020)	\$34,842,117	\$6,561,718	18.8%
Projected Future (2021 +)	\$16,850,944	\$52,220,826	309.9%
Total Lifetime Anticipated	\$51,693,061	\$58,782,545	113.7%

Exhibit 5
Allianz Life Insurance Company of North America
Nationwide Experience
Policy Form Series: GPR
As of 12/31/2020
With Average 44% Rate Increase

<u>Year</u>	<u>Earned Premium</u>	<u>Incurred Claims</u>	<u>Loss Ratio</u>
2003	\$812,042	\$0	0.0%
2004	\$15,433,770	\$447,442	2.9%
2005	\$36,473,946	\$1,117,653	3.1%
2006	\$56,837,919	\$6,042,811	10.6%
2007	\$65,093,403	\$4,568,674	7.0%
2008	\$65,442,096	\$6,871,620	10.5%
2009	\$63,841,555	\$7,677,965	12.0%
2010	\$62,117,671	\$7,984,727	12.9%
2011	\$60,662,143	\$8,498,542	14.0%
2012	\$59,540,290	\$13,080,434	22.0%
2013	\$58,456,682	\$13,369,900	22.9%
2014	\$60,987,124	\$20,314,085	33.3%
2015	\$62,462,626	\$23,907,519	38.3%
2016	\$60,933,315	\$30,565,863	50.2%
2017	\$62,541,126	\$32,337,275	51.7%
2018	\$64,472,142	\$37,662,903	58.4%
2019	\$62,672,654	\$41,919,308	66.9%
2020	\$64,209,919	\$54,266,491	84.5%
2021	\$64,167,641	\$43,412,914	67.7%
2022	\$79,715,763	\$49,629,224	62.3%
2023	\$82,480,317	\$55,289,748	67.0%
2024	\$79,071,015	\$62,284,149	78.8%
2025	\$75,584,913	\$70,020,498	92.6%
2026	\$72,023,316	\$78,617,165	109.2%
2027	\$68,397,244	\$87,753,234	128.3%
2028	\$64,710,489	\$97,525,995	150.7%
2029	\$60,985,769	\$107,152,596	175.7%
2030	\$57,232,359	\$116,626,525	203.8%
2031	\$53,471,315	\$125,410,012	234.5%
2032	\$49,715,711	\$133,779,198	269.1%
2033	\$45,996,939	\$140,915,161	306.4%
2034	\$42,330,856	\$147,195,175	347.7%
2035	\$38,743,965	\$152,161,767	392.7%
2036	\$35,253,323	\$156,195,154	443.1%
2037	\$31,891,426	\$158,400,968	496.7%
2038	\$28,673,603	\$159,229,553	555.3%
2039	\$25,621,757	\$158,271,340	617.7%
2040	\$22,746,036	\$156,022,954	685.9%
2041	\$20,066,380	\$151,800,827	756.5%
2042	\$17,586,591	\$146,466,608	832.8%
2043	\$15,314,550	\$139,936,930	913.8%
2044	\$13,247,598	\$132,847,492	1002.8%
2045	\$11,388,439	\$124,527,256	1093.5%
2046	\$9,726,554	\$115,720,229	1189.7%
2047	\$8,254,512	\$106,522,214	1290.5%
2048	\$6,959,302	\$97,497,540	1401.0%
2049	\$5,832,934	\$88,276,658	1513.4%
2050	\$4,859,928	\$79,375,050	1633.3%
2051	\$4,026,925	\$70,783,319	1757.8%
2052	\$3,317,929	\$62,911,963	1896.1%
2053	\$2,720,744	\$55,453,835	2038.2%
2054	\$2,220,334	\$48,671,674	2192.1%
2055	\$1,804,006	\$42,412,890	2351.0%
2056	\$1,458,717	\$36,785,596	2521.8%
2057	\$1,174,492	\$31,580,516	2688.9%
2058	\$941,137	\$26,952,883	2863.9%
2059	\$750,700	\$22,855,239	3044.5%
2060	\$595,780	\$19,322,995	3243.3%
2061	\$470,724	\$16,182,523	3437.8%
2062	\$370,014	\$13,488,079	3645.3%
2063	\$289,377	\$11,169,988	3860.0%
2064	\$225,041	\$9,236,995	4104.6%
2065	\$174,154	\$7,568,251	4345.7%
2066	\$134,005	\$6,142,095	4583.5%
2067	\$102,514	\$4,918,954	4798.3%
2068	\$77,886	\$3,903,432	5011.7%
2069	\$58,788	\$3,057,209	5200.4%
2070	\$44,036	\$2,373,657	5390.3%
2071	\$32,732	\$1,824,037	5572.7%
2072+	\$84,402	\$5,476,718	6488.8%

Summary of Experience at 4.5%

	<u>Earned Premium</u>	<u>Incurred Claims</u>	<u>Loss Ratio</u>
Historical (YE2020)	\$1,421,918,320	\$385,487,225	27.1%
Projected Future (2021 +)	\$821,383,997	\$1,879,322,729	228.8%
Total Lifetime Anticipated	\$2,243,302,317	\$2,264,809,954	101.0%

Exhibit 6
Allianz Life Insurance Company of North America
Maryland Experience
Policy Form Series: GPR
As of 12/31/2020
With Average 44% Rate Increase

<u>Year</u>	<u>Earned Premium</u>	<u>Incurred Claims</u>	<u>Loss Ratio</u>
2003	\$0	\$0	0.0%
2004	\$181,148	\$0	0.0%
2005	\$740,786	\$0	0.0%
2006	\$1,386,752	\$1,540	0.1%
2007	\$1,641,739	\$334,770	20.4%
2008	\$1,612,620	\$283,806	17.6%
2009	\$1,572,448	\$0	0.0%
2010	\$1,531,969	\$4,042	0.3%
2011	\$1,501,567	\$131,982	8.8%
2012	\$1,483,532	\$142,642	9.6%
2013	\$1,451,323	\$0	0.0%
2014	\$1,508,729	\$413,233	27.4%
2015	\$1,573,886	\$224,814	14.3%
2016	\$1,549,221	\$694,807	44.8%
2017	\$1,600,169	\$159,661	10.0%
2018	\$1,665,384	\$911,835	54.8%
2019	\$1,635,394	\$699,917	42.8%
2020	\$1,696,737	\$1,379,961	81.3%
2021	\$1,721,600	\$1,018,837	59.2%
2022	\$2,126,614	\$1,177,091	55.4%
2023	\$2,223,749	\$1,317,241	59.2%
2024	\$2,134,910	\$1,490,698	69.8%
2025	\$2,044,104	\$1,682,124	82.3%
2026	\$1,951,423	\$1,897,434	97.2%
2027	\$1,857,144	\$2,130,439	114.7%
2028	\$1,761,316	\$2,382,124	135.2%
2029	\$1,664,537	\$2,635,504	158.3%
2030	\$1,567,052	\$2,892,292	184.6%
2031	\$1,469,360	\$3,138,762	213.6%
2032	\$1,371,725	\$3,381,523	246.5%
2033	\$1,274,922	\$3,595,773	282.0%
2034	\$1,179,342	\$3,791,596	321.5%
2035	\$1,085,682	\$3,958,565	364.6%
2036	\$994,372	\$4,106,554	413.0%
2037	\$906,210	\$4,209,630	464.5%
2038	\$821,543	\$4,278,652	520.8%
2039	\$740,890	\$4,300,668	580.5%
2040	\$664,472	\$4,290,380	645.7%
2041	\$592,778	\$4,230,599	713.7%
2042	\$525,874	\$4,141,392	787.5%
2043	\$463,979	\$4,020,546	866.5%
2044	\$407,043	\$3,888,066	955.2%
2045	\$355,169	\$3,720,519	1047.5%
2046	\$308,105	\$3,532,027	1146.4%
2047	\$265,708	\$3,322,699	1250.5%
2048	\$227,704	\$3,109,647	1365.7%
2049	\$194,000	\$2,883,291	1486.2%
2050	\$164,290	\$2,653,024	1614.8%
2051	\$138,308	\$2,417,503	1747.9%
2052	\$115,698	\$2,190,731	1893.5%
2053	\$96,236	\$1,964,971	2041.8%
2054	\$79,574	\$1,754,615	2205.0%
2055	\$65,430	\$1,549,847	2368.7%
2056	\$53,477	\$1,358,465	2540.3%
2057	\$43,471	\$1,177,696	2709.1%
2058	\$35,133	\$1,015,283	2889.8%
2059	\$28,235	\$869,985	3081.2%
2060	\$22,551	\$739,160	3277.7%
2061	\$17,918	\$622,173	3472.3%
2062	\$14,160	\$521,729	3684.5%
2063	\$11,138	\$436,191	3916.3%
2064	\$8,723	\$363,974	4172.7%
2065	\$6,811	\$298,869	4388.3%
2066	\$5,301	\$243,626	4595.8%
2067	\$4,117	\$196,658	4776.2%
2068	\$3,195	\$156,874	4910.3%
2069	\$2,481	\$123,851	4991.4%
2070	\$1,926	\$97,324	5052.7%
2071	\$1,492	\$76,808	5146.7%
2072+	\$4,347	\$257,869	5932.0%

Summary of Experience at 4.5%

	<u>Earned Premium</u>	<u>Incurred Claims</u>	<u>Loss Ratio</u>
Historical (YE2020)	\$34,842,117	\$6,561,718	18.8%
Projected Future (2021 +)	\$22,588,495	\$50,549,371	223.8%
Total Lifetime Anticipated	\$57,430,612	\$57,111,090	99.4%

Exhibit 7
58/85 Calculations
Allianz Life Insurance of North America
Nationwide Experience
Policy Form Series: GPR

a)	The accumulated value of the initial earned premium is 58% of this value:	1,335 774
b)	The accumulated value of prior premium rate schedule increases is 85% of this value:	87 74
c)	The present value of future projected initial earned premiums is 58% of this value:	425 247
d)	The present value of future projected earned premium from prior premium rate schedule increases is PV of future projected EP from 44% increase: Combined: 85% of this value:	189 208 396 337
e)	The accumulated value of past incurred claims is The present value of future projected incurred claims* is sum of these 2 values:	385 2,067 2,453
f)	The sum of a,b,c and d is This amount is less than e)	1,432 2,453

*Projected incurred claims contain a 10% margin for moderately adverse experience.